

*Application No. 10/658718*  
*Page 2*

*Amendment*  
*Attorney Docket No. S63.2B-11232-US01*

**Amendments To The Claims:**

1. (Withdrawn-Original) A lubricious coating comprising at least one ethylenically unsaturated resin and at least one thermoplastic hydrophilic aliphatic polyether polyurethane.
2. (Withdrawn-Original) The lubricious coating of claim 1 wherein said hydrophilic aliphatic polyether polyurethane does not crosslink with said ethylenically unsaturated resin.
3. (Withdrawn-Original) The lubricious coating of claim 1 wherein said at least one ethylenically unsaturated resin and at least one hydrophilic aliphatic polyether polyurethane form a polymer network.
4. (Withdrawn-Original) The lubricious coating of claim 1 wherein said at least one ethylenically unsaturated resin possesses functional groups which are photochemically activatable.
5. (Withdrawn-Original) The lubricious coating of claim 4 further comprising a photoinitiator.
6. (Withdrawn-Original) The lubricious coating of claim 4 wherein said at least one ethylenically unsaturated resin possesses functional groups activatable by ultraviolet energy.
7. (Withdrawn-Original) The lubricious coating of claim 1 wherein said at least one aliphatic polyether polyurethane is capable of absorbing about 100% to about 2000% of its own weight in water.
8. (Withdrawn-Original) The lubricious coating of claim 1 wherein said at least one aliphatic polyether polyurethane is capable of absorbing about 200% to about 2000% of its own weight in water.
- ~~10~~ 9. (Withdrawn-Currently Amended) The lubricious coating of claim 1 wherein said at least one aliphatic polyether polyurethane is capable of absorbing about 500% to about 2000% of its own weight in water.
- ~~11~~ 10. (Withdrawn-Currently Amended) The lubricious coating of claim 1 further comprising at least one second polyurethane.
- ~~12~~ 11. (Withdrawn- Currently Amended) The lubricious coating of claim ~~11~~ 10 wherein said second polyurethane absorbs less water by weight than said aliphatic polyether polyurethane.

*Application No. 10/658718*  
*Page 3*

*Amendment*  
*Attorney Docket No. S63.2B-11232-US01*

~~13~~ 12. (Withdrawn- Currently Amended) The lubricious coating of claim 1 wherein said at least one ethylenically unsaturated resin is a member selected from the group consisting of mono-, di- and tri- acrylates, polyacrylates and mixtures thereof.

~~14~~ 13. (Withdrawn- Currently Amended) The lubricous coating of claim ~~13~~ 12 wherein said at least one ethylenically unsaturated resin is a diacrylate.

~~15~~ 14. (Withdrawn- Currently Amended) The lubricious coating of claim ~~13~~ 12 wherein said at least one ethylenically unsaturated resin is a member selected from the group consisting of butyl (meth)acrylate, methyl (meth)acrylate, ethyl (meth)acrylate, propyl (meth)acrylate, octyl (meth)acrylate, heptyl (meth)acrylate, nonyl (meth)acrylate, hexyl (meth)acrylate, n-hexyl (meth)acrylate, isopropyl (meth)acrylate, isobutyl (meth)acrylate, decyl (meth)acrylate, isodecyl (meth)acrylate, lauryl (meth)acrylate, stearyl (meth)acrylate, behenyl (meth)acrylate and melissyl (meth)acrylate, methoxyethyl (meth)acrylate, hydroxyl ethyl (meth)acrylate, glycidyl (meth)acrylate, 2-ethylhexyl (meth)acrylate, 2-ethoxyethyl (meth)acrylate, ethylene glycol di(meth)acrylate, propylene glycol di(meth)acrylate, diethylene glycol di(meth)acrylate, polyethylene glycol di(meth)acrylate, 1,5-pentanediol di(meth)acrylate, neopentyl glycol di(meth)acrylate (NPG), 1,6-hexanediol (meth)acrylate, 1,6-hexandiol di(meth)acrylate, polyethylene glycol di(meth)acrylate, polypropylene glycol di(meth)acrylate, pentaerythritol tri(meth)acrylate, trimethylolpropane tri(meth)acrylate, trimethylolpropane dipentaerythritol penta(meth)acrylate, pentaerythritol tetra(meth)acrylate, triethylene glycol di(meth)acrylate, n-butyl (meth)acrylate, benzoin (meth)acrylate, glyceryl propoxy tri(meth)acrylate, 1,3-propylene glycol di(meth)acrylate, tripropylene glycol di(meth)acrylate, 1,3-butylene glycol di(meth)acrylate, 1,4-butanediol di(meth)acrylate, 1,6-hexanediol di(meth)acrylate, diethylene glycol di(meth)acrylate, triethylene glycol di(meth)acrylate, tetraethylene glycol di(meth)acrylate, methyl ethacrylate, ethoxylated bisphenol-A-di(meth)acrylate, and mixtures thereof.

~~16~~ 15. (Withdrawn- Currently Amended) The lubricious coating of claim 1 wherein said at least one ethylenically unsaturated resin is selected from the group consisting of styrene, divinylbenzene, acrylamides,

~~17~~ 16. (Withdrawn- Currently Amended) The lubricious coating of claim 1 wherein said ethylenically unsaturated resin is a one-part system.

~~18~~ 17. (Withdrawn-Currently Amended) A medical device comprising ~~the~~ a lubricious coating,

*Application No. 10/658718*  
*Page 4*

*Amendment*  
*Attorney Docket No. S63.2B-11232-US01*

the lubricious coating comprising at least one ethylenically unsaturated monomer, oligomer or prepolymer and at least one thermoplastic hydrophilic aliphatic polyether polyurethane comprising the residue of polytetramethylene ether glycol of claim 1.

~~19~~ 18. (Withdrawn-Currently Amended) A lubricious coating comprising at least one ethylenically unsaturated resin and at least one hydrophilic polyurethane capable of absorbing about 100% to about 2000% of its own weight in water.

~~20~~ 19. (Withdrawn- Currently Amended) The lubricious coating of claim ~~19~~ 18 wherein said at least one hydrophilic polyurethane is capable of absorbing about 200% to about 2000% of its own weight in water.

~~21~~ 20. (Withdrawn- Currently Amended) The lubricious coating of claim ~~19~~ 18 wherein said at least one hydrophilic polyurethane is capable of absorbing about 500% to about 2000% of its own weight in water.

~~22~~ 21. (Withdrawn- Currently Amended) The lubricious coating of claim ~~19~~ 18 wherein said at least one hydrophilic polyurethane is an aliphatic polyether polyurethane.

~~23~~ 22. (Withdrawn- Currently Amended) The lubricious coating of claim ~~19~~ 18 wherein said aliphatic polyether polyurethane is thermoplastic.

~~24~~ 23. (Withdrawn- Currently Amended) The lubricious coating of claim ~~19~~ 18 wherein said at least one ethylenically unsaturated resin comprises at least one member selected from the group consisting of (meth)acrylates, styrene, divinyl benzene, acrylamides, (meth)acrylic acids, carboxylic acids, and mixtures thereof.

~~25~~ 24. (Withdrawn- Currently Amended) The lubricious coating of claim ~~19~~ 18 wherein said at least one ethylenically unsaturated resin is a mono-, di, or tri-acrylate, polyacrylate or mixture thereof.

~~26~~ 25. (Withdrawn- Currently Amended) The lubricious coating of claim ~~25~~ 24 wherein said at least one ethylenically unsaturated resin is neopentylglycol diacrylate, polyethylene glycol diacrylate or mixture thereof.

~~27~~ 26. (Withdrawn-Currently Amended) A medical device comprising a lubricious coating, said lubricious coating comprising at least one ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer and at least one polyurethane capable of absorbing about 500% to about 2000% of its own weight in water, said at least one polyurethane comprising the residue of polytetramethylene

*Application No. 10/658718**Page 5**Amendment**Attorney Docket No. S63.2B-11232-US01*

ether glycol.

28 27. (Currently Amended) A medical device comprising a lubricious coating, said lubricious coating comprising at least one ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer and at least one aliphatic polyether polyurethane wherein said at least one aliphatic polyether polyurethane does not crosslink, and said at least one aliphatic polyether polyurethane comprises the residue of polytetramethylene ether glycol.

29 28. (Currently Amended) The medical device of claim 28 27 wherein said at least one ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer comprises functional groups which are photochemically activatable.

30 29. (Currently Amended) The medical device of claim 29 28 further comprising at least one photoinitiator.

34 30. (Currently Amended) The medical device of claim 29 28 wherein said at least one ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer comprises functional groups which are activatable by ultraviolet radiation.

32 31. (Currently Amended) The medical device of claim 28 27 wherein said at least one aliphatic polyether polyurethane is capable of absorbing about 100% to about 2000% of its own weight in water.

33 32. (Currently Amended) The medical device of claim 28 27 wherein said at least one aliphatic polyether polyurethane is capable of absorbing about 200% to about 2000% of its own weight in water.

34 33. (Currently Amended) The medical device of claim 28 27 wherein said at least one aliphatic polyether polyurethane is capable of absorbing about 500% to about 2000% of its own weight in water.

35 34. (Currently Amended) The medical device of claim 28 27 wherein said at least one ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer comprises at least one member selected from the group consisting of mono-, di- and tri- acrylates, polyacrylates and mixtures thereof.

36 35. (Currently Amended) The medical device of claim 28 27 wherein said at least one ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer is a diacrylate.

37 36. (Currently Amended) The medical device of claim 36 35 wherein said at least one

**Application No. 10/658718**  
**Page 6**

**Amendment**  
**Attorney Docket No. S63.2B-11232-US01**

ethylenically unsaturated ~~resin~~ monomer, oligomer or prepolymer comprises at least one member selected from the group consisting of butyl (meth)acrylate, methyl (meth)acrylate, ethyl (meth)acrylate, propyl (meth)acrylate, octyl (meth)acrylate, heptyl (meth)acrylate, nonyl (meth)acrylate, hexyl (meth)acrylate, n-hexyl (meth)acrylate, isopropyl (meth)acrylate, isobutyl (meth)acrylate, decyl (meth)acrylate, isodecyl (meth)acrylate, lauryl (meth)acrylate, stearyl (meth)acrylate, behenyl (meth)acrylate and melissyl (meth)acrylate, methoxyethyl (meth)acrylate, hydroxyl ethyl (meth)acrylate, glycidyl (meth)acrylate, 2-ethylhexyl (meth)acrylate, 2-ethoxyethyl (meth)acrylate, ethylene glycol di(meth)acrylate, propylene glycol di(meth)acrylate, diethylene glycol di(meth)acrylate, polyethylene glycol di(meth)acrylate, 1,5-pentanediol di(meth)acrylate, neopentyl glycol di(meth)acrylate (NPG), 1,6-hexanediol (meth)acrylate, 1,6-hexanediol di(meth)acrylate, polyethylene glycol di(meth)acrylate, polypropylene glycol di(meth)acrylate, pentaerythritol tri(meth)acrylate, trimethylolpropane tri(meth)acrylate, trimethylolpropane dipentaerythritol penta(meth)acrylate, pentaerythritol tetra(meth)acrylate, triethylene glycol di(meth)acrylate, n-butyl (meth)acrylate, benzoin (meth)acrylate, glyceryl propoxy tri(meth)acrylate, 1,3-propylene glycol di(meth)acrylate, tripropylene glycol di(meth)acrylate, 1,3-butyleneglycol di(meth)acrylate, 1,4-butanediol di(meth)acrylate, 1,6-hexanediol di(meth)acrylate, diethylene glycol di(meth)acrylate, triethylene glycol di(meth)acrylate, tetraethylene glycol di(meth)acrylate, methyl ethacrylate, ethoxylated bisphenol-A-di(meth)acrylate and mixtures thereof.

38 ~~37~~. (Currently Amended) The medical device of claim ~~37~~ 36 wherein said at least one ~~crosslinkable~~ crosslinkable material is selected from the group consisting of neopentyl glycol diacrylate, polyethylene glycol diacrylate and mixtures thereof.

~~39~~ 38. (Withdrawn- Currently Amended) The medical device of claim ~~28~~ 27 wherein said at least one ethylenically unsaturated resin comprises at least one member selected from the group consisting of styrene, divinyl benzene, acrylamides, carboxylic acid, (meth)acrylic acids, and mixtures thereof.

40 ~~39~~. (Currently Amended) The medical device of claim ~~28~~ 27 wherein said medical device is a catheter assembly.

41 40. (Currently Amended) The medical device of claim ~~40~~ 39 wherein said lubricious coating is on a guide wire, dilatation balloon, catheter shaft or combination thereof.

***Application No. 10/658718***  
***Page 7***

***Amendment***  
***Attorney Docket No. S63.2B-11232-US01***

41. (New) The medical device of claim 17 wherein said at least one hydrophilic polyurethane further comprises the residue of polyethylene oxide or the residue of polyethylene glycol.
42. (New) The medical device of claim 27 wherein said at least one hydrophilic polyurethane further comprises the residue of polyethylene oxide or the residue of polyethylene glycol.
43. (New) The medical device of claim 28 wherein said at least one hydrophilic polyurethane further comprises the residue of polyethylene oxide or the residue of polyethylene glycol.